(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 15 July 2004 (15.07.2004)

(10) International Publication Number WO 2004/058222 A1

(51) International Patent Classification ⁷ :	A61K 9/14	60/435,495	20 December 2002 (20.12.2002)	US
		60/450,722	28 February 2003 (28.02.2003)	US
(21) International Application Number:		60/454,997	14 March 2003 (14.03.2003)	US
• •	US2003/041392			
		(71) Applicant (for	all designated States except US):	ST.
(22) International Filing Date:			OCIATES LLC/FABER RESEA	

(22) International Filing Date:

22 December 2003 (22.12.2003)

(25) Filing Language:

60/435,037

60/435,162

60/435,338

60/435,509

(30)

English

(26) Publication Language:

English

)	Priority Data:		
	60/435,163	20 December 2002 (20.12.2002)	US
	60/435,416	20 December 2002 (20.12.2002)	US
	60/435,445	20 December 2002 (20.12.2002)	US
	60/435,415	20 December 2002 (20.12.2002)	US
	60/435,488	20 December 2002 (20.12.2002)	US
	60/435,449	20 December 2002 (20.12.2002)	US
	60/435,447	20 December 2002 (20.12.2002)	US
	60/435,506	20 December 2002 (20.12.2002)	US
	60/435,505	20 December 2002 (20.12.2002)	US
	60/435,507	20 December 2002 (20.12.2002)	US
	60/435,496	20 December 2002 (20.12.2002)	US
	60/435,075	20 December 2002 (20.12.2002)	US
	60/435,423	20 December 2002 (20.12.2002)	US
	60/435,336	20 December 2002 (20.12.2002)	US
	60/435,630	20 December 2002 (20.12.2002)	US
	60/435,372	20 December 2002 (20.12.2002)	US
	60/435,106	20 December 2002 (20.12.2002)	US
	60/435,388	20 December 2002 (20.12.2002)	US
	60/435,632	20 December 2002 (20.12.2002)	US
	60/435,557	20 December 2002 (20.12.2002)	US
	60/435,558	20 December 2002 (20.12.2002)	US
	60/435,132	20 December 2002 (20.12.2002)	US
	60/435,497	20 December 2002 (20.12.2002)	US
	60/435,494	20 December 2002 (20.12.2002)	US
	60/435,508	20 December 2002 (20.12.2002)	US
	60/435,501	20 December 2002 (20.12.2002)	US
	60/435,565	20 December 2002 (20.12.2002)	US
	60/435,038	20 December 2002 (20.12.2002)	US

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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HIGH PRESSURE COMPACTION FOR PHARMACEUTICAL FORMULATIONS

20 December 2002 (20.12.2002)

20 December 2002 (20.12.2002)

20 December 2002 (20.12.2002)

20 December 2002 (20.12.2002)

(57) Abstract: Methods for producing a pharmaceutical preparation of pressure-fused particles including an active pharmaceutical ingredient are disclosed. The methods include the application of a pressure of between 0.1 GPa and 10 GPa to produce a compacted sample. The pressure-fused particles of the invention are useful for parenteral administration, and particularly sustained-release formulations, due to dissolution kinetics which are superior to conventional crystalline or amorphous packed powder preparations of active pharmaceutical ingredients. Pharmaceutical preparations including such pressure-fused microparticles are also disclosed.

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